

Accessing NASA's Earth System Data and Tools

Presented by Jim Acker/NASA GSFC and
Lin Chambers/NASA LaRC

NASA has literally petabytes of Earth system data which can be accessed through a variety of places and using a variety of tools.

1. Distributed Active Archive Centers (DAACs). Visit: <https://earthdata.nasa.gov/>

Find links to individual, topically focused data centers in the top bar.

Audience: Generally aimed at the researcher level, but also provide data and information to educators, students and the general public

Resources: The NASA DAAC system has an extraordinary amount of Earth science data; each DAAC has its own individual data archival and ordering system, as well as supporting resources for the use and understanding of the data holdings. In general, each DAAC has a specific focus area.

2. Custom interfaces to data, i.e. visit: <http://disc.sci.gsfc.nasa.gov/giovanni/>

A Web-based application developed by the GES DISC that provides a simple and intuitive way to visualize, analyze, and access vast amounts of Earth science remote sensing data without having to download the data.

Audience: Researcher level, but working (through NICE) on interface for students.

Resources: Giovanni provides a variety of data products that can give insight into Earth System processes. Giovanni provides simple (map, time-series, animation) and advanced (Hovmöller plot, comparison plot, vertical profile) analysis options.

3. Simplified interfaces to data, i.e., visit: <http://mynasadata.larc.nasa.gov>

A Web-based interface to a selected subset of MY NASA DATA, with a single data access tool to enable easy exploration.

Audience: K-12 students and teachers.

Resources: Access to data “microsets” with related lesson plans, definitions, project ideas, and more, to make authentic data exploration in the K-12 classroom possible. Data can be viewed as images, maps, graphs, or actual values can be downloaded.

4. Simplified interfaces to data, i.e., visit: <http://neo.sci.gsfc.nasa.gov/>

Mission is to help you picture climate change and environmental changes happening on our home planet. Here you can search for and retrieve satellite images of Earth. Download them; export them to GoogleEarth; perform basic analysis. Tracking regional and global changes around the world just got easier!

Audience: General science-interested public.

Resources: Image maps of data, with easy-to-generate visualization options

5. Focused interfaces to data, i.e., visit: <http://climate.nasa.gov>

Provides data on selected “climate indicators” as well as interactive “Eyes on Earth” tool.

Audience: General science-interested public.

Resources: Broad “library” of climate-related information and instructional graphics. Does not provide hands-on analysis capability with data.